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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,795	06/20/2003	Tadashi Kotani	NGB-14886	9681
40854	7590	09/09/2004	EXAMINER	
RANKIN, HILL, PORTER & CLARK LLP			BROWN, KHALED	
4080 ERIE STREET			ART UNIT	
WILLOUGHBY, OH 44094-7836			PAPER NUMBER	
			2877	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/600,795

Applicant(s)

KOTANI, TADASHI

Examiner

Khaled Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-6 is/are rejected.  
7) ☒ Claim(s) 7 and 8 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The amendment filed 6-7-04 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: page 2, lines 1-8, of applicants Amendment To The Specification, "...which can restore the interference state to or above a threshold where fine adjustment of an interferometer can again be effective..." Additionally, the applicant has not included in applicants Remarks filed 6-7-04 the certification that --No New Matter Has Been Added—concerning the proposed amendments to the specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. On pages 5 and 6 of applicants Amendment To

The Claims, the added limitations of "and fine adjustment of the interferometer is effective" is new matter.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,4,5 and 6 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Wijntjes et al (US 4711573).

Re clms 1,5: Wijntjes et al discloses a method of adjusting a fixed mirror of a double-beam interferometer including a control interferometer, comprising: detecting a laser interference light beam from the control interferometer (Col 4 lines 39-44); and adjusting an angle of the fixed mirror with respect to a laser light beam axis so that the intensity of interference of the laser light beams becomes maximum or the laser light beams become in an arbitrary interference state (Col 5 lines 49-54). However, Wijntjes et al does not expressly state that during the initial adjustment the laser light beams do not interfere at all. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to begin the adjustment of the fixed mirror at a state where laser light beams do not interfere at all because during the initial set up of an

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interferometer the mirrors are not in critical alignment and without this critical there will not be any initial interference of the laser light beams.

Re clm 6: initial amplitude is zero (during initial set up of the interferometer mirrors)

Re clm 4: Wijntjes et al discloses an interferometric spectrophotometer comprising: a control interferometer having fixed mirror; a photo detector for detecting a laser interference light beam from the control interferometer; and an adjusting mechanism for adjusting an angle of the fixed mirror with respect to a laser light beam axis so that the intensity of interference of the laser light beams becomes maximum or the laser light beams become in an arbitrary interference state (Col 5 lines 49-54). However, Wijntjes et al does not expressly state that the adjustment mechanism adjusts the fixed mirror from a state where laser light beams do not interfere at all. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to begin the adjustment of the fixed mirror at a state where laser light beams do not interfere at all because during the initial set up of an interferometer the mirrors are not in critical alignment and without this critical alignment there will not be any initial interference of the laser light beams.

***Allowable Subject Matter***

5. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose or suggest the limitation of "moving the posture of the fixed mirror to points on a circle around the set point where the amplitude became larger than the threshold value as a center" all in conjunction with the rest of the claimed subject matter.

7. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

### ***Response to Arguments***

8. Applicant's arguments filed 6-7-04 have been fully considered but they are not persuasive. The applicant argues in regard to claim 1-4 that Wijntjes et al only teaches a method of fine adjustment and that rough adjustment is not taught using a method where an interference light beam is detected from the control interferometer (Remarks p. 10 lines 17-23).

9. In response to applicant's arguments regarding claim 1 and its dependent claims, the recitation "Rough Adjustment" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand

alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

10. Additionally even if the limitation "Rough Adjustment" were to be given patentable weight, Wijntjes et al would still meet this additional limitation. The initial setup of the apparatus of Wijntjes et al is a Rough Adjustment and the dynamic function of the method disclosed in Wijntjes et al can be considered a Fine Adjustment.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Thompson et al 4480914, Buijs et al 4345838, Curbelo et al 5166749, Schindler 3809481, Westerberg 4385835 and Ge 6707559.

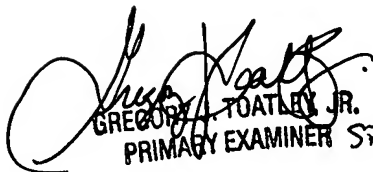
12. Note: No IDS has been filed with the Amendment entered 6-7-04.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khaled Brown whose telephone number is 571-272-2411. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J Toatley Jr. can be reached on 571-272-2800 Ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KB  
September 6, 2004

  
GREGORY TOATLEY JR.  
PRIMARY EXAMINER 575 2877